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PATENT

(5760-20000/VRTS0629)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/791,472

Filed: March 2, 2004

Inventor(s):

Hans F. van Rietschote

Mahesh P. Saptarshi

Craig W. Hobbs

Title: Central Administration and
Maintenance of
Workstations Using Virtual
Machines, Network
Filesystems, and
Replication

§ Examiner: Unknown
§ Group/Art Unit: 2186
§ Atty. Dkt. No: 5760-
§ 20000/VRTS0629

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated below.

Lawrence J. Merkel

Name of Registered Representative

Signature

Date

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant requests consideration of ☒ the references listed on the attached Form PTO-1449 and/or ☒ the additional information identified below in paragraph 3.

☒ A copy of each required reference listed on the Form PTO-1449 is enclosed.

☐ The references listed on the Form PTO-1449 were previously cited in application serial no. _____ to which the captioned application is seeking priority under 35 U.S.C. §120; therefore, a copy of each reference is not enclosed.

☒ The present application is a U.S. national patent application filed after June 30, 2003, or an international application that entered the national stage under 35 USC § 371 after June 30, 2003. Therefore, copies of the cited U.S. patents and/or U.S. patent application publications are not enclosed.

1. This Information Disclosure Statement is submitted:

a. ☐ within 3 months of the filing date of a national application other than a continued prosecution application under § 1.53(d);

- c. ☐ after the mailing date of a final Office Action or a Notice of Allowance and prior to payment of the issue fee, and thus: the certification of paragraph 2 below is provided and a fee of \$180.00 is enclosed.

2. It is hereby certified:

- ☐ that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and that this communication was not received by any individual designated in § 1.56(c) more than thirty (30) days prior to the filing of the information disclosure statement;
- ☐ that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three (3) months prior to the filing of the Statement; or
- ☐ that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in § 1.56 (c) more than three (3) months prior to the filing of the Statement.

3. ☒ Consideration of the following additional information (including any co-pending or abandoned U.S. applications, prior uses and/or sales, etc.) is requested:

U.S. Application Serial No. 10/616,437	(5760-12200)
U.S. Application Serial No. 10/821,559	(5760-01301)
U.S. Application Serial No. 10/109,406	(5760-00300)
U.S. Application Serial No. 10/108,882	(5760-00200)
U.S. Application Serial No. 10/109,186	(5760-00400)

pp. 1-3 entitled "Background of the Invention" from the specification of the captioned application.

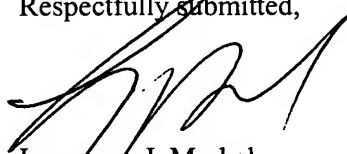
4. For each non-English language reference listed on the attached Form PTO-1449:

- ☐ reference is made to an English language translation submitted herewith, and/or
- ☐ reference is made to a foreign patent office search report (in the English language) submitted herewith, and/or
- ☐ reference is made to an English language translation of a foreign patent office search report submitted herewith, and/or
- ☐ reference is made to the concise explanation contained in the specification of the present application at page(s) _____, and/or

- ☐ reference is made to the concise explanation contained in the specification of the present application at page(s) _____, and/or
- ☐ reference is made to the concise explanation set forth below:
5. ☐ Applicant also offers the following comments for the Examiner's consideration:
6. ☐ Also enclosed is a copy of a foreign search report citing these references.
7. ☐ The listed documents were brought to the attention of the Applicant(s) after payment of the issue fee in the captioned case. The documents were cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. Applicant(s) request this Information Disclosure Statement and attached Form PTO-1449 be placed in the file of the captioned application.
8. ☐ Applicant(s) requests that the Information Disclosure Statement and attached Form PTO-1449 and references, which are being filed before the grant of the patent and pursuant to 37 C.F.R. § 1.97(i), be placed in the file of the captioned application.

If any required fees are missing, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert & Goetzel, P.C. Deposit Account No. 501505/5760-20000/LJM.

Respectfully submitted,



Lawrence J. Merkel
Reg. No. 41,191
Agent for Applicant(s)

MEYERTONS, HOOD, KIVLIN,
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(512) 853-8800

Date: 9/22/04

Form PTO-1449 (modified) List of Patents and Publications For Applicant's Information Disclosure Statement (Use several sheets if necessary)			ATTY. DKT. NO. 5760-20000 APPLICANT: van Rietschote, et al. FILING DATE: March 2, 2004		SERIAL NO. 10/791,472 GROUP: 2186		
U.S. PATENT DOCUMENTS							
EXAM. INITIALS	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
		5,872,931	2/16/99	Chivaluri			
		6,029,166	2/22/00	Mutalik, et al.			
		6,341,329	1/22/02	LeCrone, et al.			
		6,075,938	6/13/00	Bugnion, et al.			
		6,757,778	6/29/01	van Rietschote			
		6,421,739	7/16/02	Holida			
		6,694,346	2/17/04	Aman, et al.			
		6,718,538	4/6/04	Mathiske			
		6,757,778	6/9/01	van Rietschote			
		2003/0028861	2/6/03	Wallman, et al.			
		2002/0129078	9/12/02	Plaxton, et al.			
		2004/0010787	1/15/04	Traut, et al.			
		2002/0049869	4/25/02	Ohmura, et al.			
		2002/0099753	7/25/02	Hardin, et al.			
		6,496,847	12/17/02	Bugnion, et al.			
		6,397,242	5/28/02	Devine, et al.			
		5,408,617	4/18/95	Yoshida			
		5,257,386	10/26/93	Saito			
		6,151,618	11/21/00	Wahbe, et al.			
		2003/0033431	2/13/03	Shinomiya			
		2001/0016879	8/23/01	Seklguchi, et al.			
		5,944,782	8/31/99	Noble, et al.			
		5,852,724	12/22/98	Glenn, II, et al.			
		6,363,462	3/26/02	Bergsten			
		6,324,627	11/27/01	Kricheff, et al.			
		6,298,428	10/2/01	Munroe, et al.			
		6,298,390	10/2/01	Matena, et al.			
		5,621,912	4/15/97	Borruso, et al.			

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Information Disclosure Statement--PTO 1449 (modified)

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EXAM. INITIALS	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
		4,969,092	11/6/90	Shorter			
		4,912,628	3/27/90	Briggs			
		6,230,246	5/8/01	Lee, et al.			
		6,493,811	12/10/02	Blades, et al.			
		6,438,642	8/20/02	Shaath, Kamel			

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	A1	Veritas, "Executive Overview," Technical Overview, pages 1-9.;
	A2	Kinshuk Govil, et al., "Cellular Disco: Resource Management Using Virtual Clusters on Shared-Memory Multiprocessors," 17 th ACM Symposium on Operating Systems Principles (SOSP'99), Published as Operating Systems Review 34(5):154-169, December 1999, pages 154-169.
	A3	Edouard Bugnion, et al., "Disco: Running Commodity Operating Systems on Scalable Multiprocessors," Computer Systems Laboratory, Stanford, CA, 33 pages.
	A4	"White Paper, GSX Server," VMware, Inc., December 2000, pages 1-9.
	A5	"Vmware GSX Serve, The Server Consolidation Solution," VMware, Inc., 2001, 2 pages.
	A6	"Manage Multiple Worlds., From Any Desktop," VMware, Inc., 2000, 2 pages.
	A7	"VMware ESX Server, The Server Consolidaton Solution for High-Performance Environments," VMware, Inc., 2001, 2 pages.
	A8	Melinda Varian, "VM and the VM Community: Past, Present, and Future," Operating Systems, Computing and Information Technology, Princeton Univ., August 1997, pp. 1-67.
	A9	VERITAS, "Comparison: Microsoft Logical Disk Manager and VERITAS Volume Manager for Windows," May 2001, 4 pages.
	A10	VERITAS, " How VERITAS Volume Manager Complements Hardware RAID in Microsoft Server Environments," May 2001, pp. 1-7.
	A11	VERITAS, "VERITAS Volume Manager for Windows, Best Practices," May 2001, pp. 1-7.
	A12	Barrie Sosinky, Ph.D., "The Business Value of Virtual Volume Management, In Microsoft Window NT and Windows 2000 Netowrks," VERITAS, A white paper for administrators and planners, October 2001, pp.1-12.
	A13	"BladeFram™ System Overview," Egenera, Inc., 2001 2 pages.
	A14	White Paper, "The Egenera™ Processing Area Network (PAN) Architecture," Egenera, Inc., 2002, 20 pages.
	A15	White Paper, "Emerging Server Architectures," Egenera, Inc., 2001, 12 pages.
	A16	White Paper, "Improving Data Center Performance," Egenera, Inc., 2001, 19 pages.
	A17	White Paper, "Guidelines for Effective E-Business Infrastructure Management," Egenera, Inc., 2001, 11 pages.

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OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)			
	A18	White Paper, "The Pros and Cons of Server Clustering in the ASP Environment," Egenera, Inc., 2001, 10 pages.	
	A19	Position Paper, "Taking Control of The Data Center," Egenera, Inc., 2001, 4 pages.	
	A20	Position Paper, "The Linux Operating System: How Open Source Software Makes Better Hardware," Egenera, Inc., 2001, 2 pages.	
	A21	"Solution Overview," TrueSAN Networks, Inc., 2002, 7 pages.	
	A22	"Simics: A Full System Simulation Platform," Reprinted with permission from Computer, February 2002, © The Institute of Electrical and Electronics Engineering, Inc., pp. 50-58.	
	A23	"Introduction to Simics Full-System Simulator without Equal," Virtutech, July 8, 2002, 29 pages.	
	A24	"The Technology of Virtual Machines," A Connectix White Paper, Connectix Corp., 2001, 13 pages.	
	A25	"The Technology of Virtual PC," A Connectix White Paper, Connectix Corp., 2000, 12 pages.	
	A26	"About LindowsOS," Lindows.com, http://www.lindows.com/lindows_products_lindowsos.php , 2002, 2 pages.	
	A27	"Savannah: This is a Savannah Admin Documentation," Savannah, Free Software Foundation, Inc.© 2000-2002, 31 pages.	
	A28	"Virtuozzo Basics," Virtuozzo, http://www.sw-soft.com/en/products/virtuozzo/basics/ , © 1994-2002 SWsoft, printed from web on 12/13/2002, 2 pages.	
	A29	"What is Virtual Environmnet(VE)?," SWsoft, http://www.sw-soft.com/en/products/virtuozzo/we/ , © 1994-2002 SWsoft, printed from web on 12/13/2002, 2 pages.	
	A30	"Products," Netraverse, Inc, 2002, http://www.netraverse.com/products/index.php , printed from web on 12/13/2002, 1 page.	
	A31	"NeTraverse Win4Lin 4.0 - Workstation Edition," Netraverse, Inc, 2002, http://www.netraverse.com/products/win4lin40/ , printed from web on 12/13/2002, 1 page.	
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	A33	"Win4Lin Desktop 4.0," Netraverse, Inc, 2002, http://www.netraverse.com/products/win4lin40/features.php , printed from web on 12/13/2002, 2 page.	
	A34	"Win4Lin Desktop 4.0," Netraverse, Inc, 2002, http://www.netraverse.com/products/win4lin40/requirements.php , printed from web on 12/13/2002, 2 page.	
	A35	"Win4Lin Terminal Server 2.0," Netraverse, Inc, 2002, http://www.netraverse.com/products/wts , printed from web on 12/13/2002, 1 page.	
	A36	"Win4Lin Terminal Server 2.0," Netraverse, Inc, 2002, http://www.netraverse.com/products/wts/benefits.php , printed from web on 12/13/2002, 1 page.	
	A37	Win4Lin Terminal Server 2.0," Netraverse, Inc, 2002, http://www.netraverse.com/products/wts/features.php , printed from web on 12/13/2002, 2 pages.	
	A38	Win4Lin Terminal Server 2.0," Netraverse, Inc, 2002, http://www.netraverse.com/products/wts/requirements.php , printed from web on 12/13/2002, 2 pages.	

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OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)			
	A39	Win4Lin Terminal Server 2.0," Netraverse, Inc, 2002, http://www.netraverse.com/products/wts/technology.php , printed from web on 12/13/2002, 1 page.	
	A40	Win4Lin," Netraverse, Inc, 2002, http://www.netraverse.com/support/docs/Win4Lin-whitepapers.php , printed from web on 12/13/2002, 5 pages.	
	A41	"Virtual PC for Windows," Connectix, Version 5.0, 2002, 2 pages	
	A42	Dave Gardner, et al., "WINE FAQ," © David Gardner 1995-1998, printed from www.winehq.org , 13 pages.	
	A43	"Winelib User's Guide," Winelib, www.winehq.org , 26 pages.	
	A44	John R. Sheets, et al. "Wine User Guide," www.winehq.org , pages 1-53.	
	A45	"Wine Developer's Guide," pages, www.winehq.org , 1-104.	
	A46	VERITAS, "VERITAS Volume Manager for Windows NT," Version 27, 2001, 4 pages.	
	A47	Sapuntzakis, et al., "Optimizing the Migration of Virtual Computers," Proceedings of the Fifth Symposium on Operating Systems Design and Implementation, December 2002, 14 pages.	
	A48	Helfrich, et al., "Internet Suspend/Resume," ISR Project Home Page, 2003, 4 pages.	
	A49	Kozuch, et al., "Internet Suspend/Resume," IRP-TR-02-01, April 2002, Accepted to the Fourth IEEE Workshop on Mobile Computing Systems and Applications, Callicoon, NY, June 2002, Intel Research, 9 pages.	
	A50	Kozuch, et al., "Efficient State Transfer for Internet Suspend/Resume," IRP-TR-02-03, May 2002, Intel Research, 13 pages.	
	A51	Tolia, et al., "Using Content Addressing to Transfer Virtual Machine State," IRP-TR-02-11, Summer 2002, Intel Research, 11 pages.	
	A52	Flinn, et al., "Data Staging on Untrusted Surrogates," IRP-TR-03-03, March 2003, Intel Research, To Appear in the Proceedings of the 2 nd USENIX Conference on File and Storage Technologies, San Francisco, 16 pages.	
	A53	Tolia, et al., "Opportunistic Use of Content Addressable Storage for Distributed File Systems," IRP-TR-03-02, June 2003, Intel Research, To Appear in the Proceedings of the 2003 USENIX Annual Technical Conference, San Antonio, TX, 16 pages.	
	A54	VMware, Inc., "VMware Control Center," 2003, 3 pages.	
	A55	InfoWorld, Robert McMillan, "VMware Launches VMware Control Center," 2003, 2 pages.	
	A56	VMware, Inc., "VMware Control Center: Enterprise-class Software to Manage and Control Your Virtual Machines," 2003, 2 pages.	
	A57	John Abbott, Enterprise Software, "VMware Heads Toward Utility Computing With New Dynamic Management Tools," July 1, 2003, 4 pages.	
	A58	Dejan S. Milogicic, et al., "Process Migration," August 10, 1999, 49 pages.	
	A59	Xian-He Sun, et al., "A Coordinated Approach for Process Migration in Heterogeneous Environments," 1999, 12 pages.	
	A60	Kasidit Chanchio, et al., "Data Collection and Restoration for Heterogeneous Process Migration," 1997, 6 pages.	

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Information Disclosure Statement--PTO 1449 (modified)

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